

2015

# Paxil

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*Parkland College*

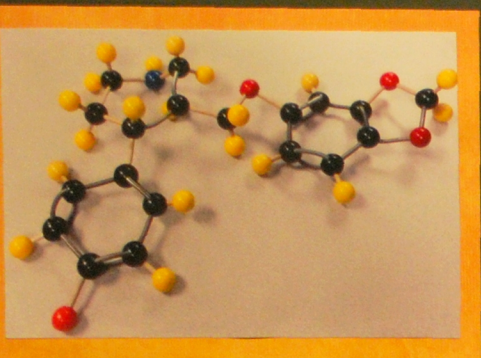
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# PAXIL

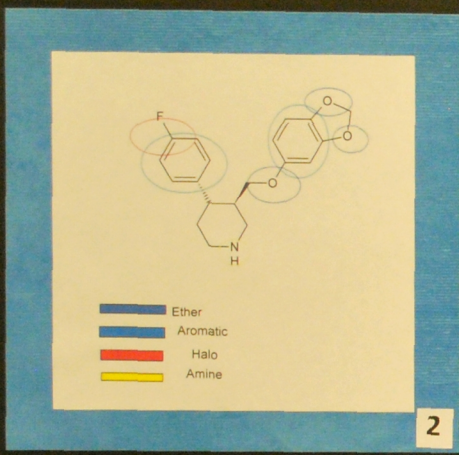
**AVAILABILITY**  
10 MG/5 ML [250ML]  
Tablets: 10 mg, 20 mg,  
30 mg, 40 mg scored.

GENERIC NAME: PAROXETINE

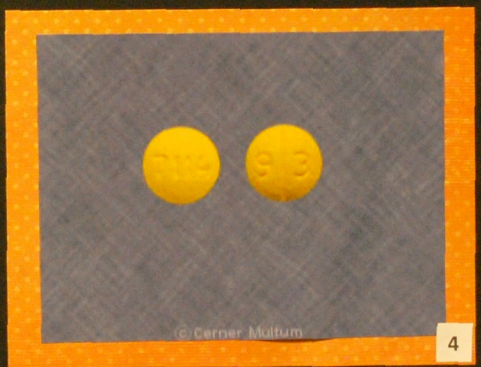
**TRADE NAMES:**

- BRIDSELE
- PEXEVA
- PAXIL
- PAXIL CR4

**CHEMICAL FORMULA:**  
 $C_{19}H_{20}FNO_3$



**Water Solubility**  
0.00853 mg/mL  
**Insoluble**  
(below 1g/100mL)



**DOSE: 10 MG TABLET**  
(10 mg)(1g/1000mg)(1 mole/329.37g)(6.02x10<sup>23</sup>g/mole)  
= 2 X 10<sup>19</sup> Molecules C<sub>19</sub>H<sub>20</sub>FNO<sub>3</sub>

**CLASSIFICATION:**  
Antidepressant;  
Selective Serotonin 5-HT Reuptake Inhibitor (SSRI)

**DOSAGE**

Adults- 10-50 mg/day (max:80 mg/day);  
25 mg sustained release daily in morning;  
May increase by 12.5 mg (max: 62.5 mg/day);  
use lower starting doses for patients with renal or hepatic insufficiency.

**CHEMICAL NAMES:**

(3S, 4R)-3-[(1,3-Benzodioxol-5-yloxy)methyl]-4-(4-fluorophenyl)piperidine; (-)-trans-4-(p-fluorophenyl)-3-[[3,4z(methylenedioxy)phenoxy]methyl]piperidine.

**USES:**

Used to treat depression, obsessive-compulsive disorders, panic attacks, excessive social anxiety, generalized anxiety, post-traumatic stress disorder (PTSD), premenstrual dysphoric disorder (PMDD), hot flashes.

**UNLABELED USES:**

This drug can also be used to treat diabetic neuropathy, myoclonus, bipolar depression in conjunction with lithium, chronic headache, premature ejaculation, fibromyalgia.

**Body's Processing of Paxil**

**Administration**

This medication is intended for oral use. Do not chew or crush as it is in sustained release form. It must be swallowed.

**Absorption**

99% absorbed from gastrointestinal tract. May take up to two weeks for absorption.

**Metabolism**

This drug metabolizes extensively in the liver to inactive metabolites via CYP2D6, which is an enzyme in the liver responsible for oxidative metabolism of drugs.

**Elimination**

Less than 2% is excreted unchanged in urine. 65% appears in urine as metabolites. Metabolites of paroxetine are also excreted in feces, presumably via bile. All of the elimination takes place within 24 hours.

**REFERENCES**

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3. Physician's Desk Reference. (2015) Drug summary Zilagen Abacavir Sulfate. *PDR.net*. Retrieved from <http://www.pdr.net/drug-summary/zilagen?druglabelid=609>

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Paxil's Ratio of  
Hydrophilic & Hydrophobic  
Functional Groups  
**5:2**

**Ether** (hydrophilic)  
**Halo** (hydrophilic)  
**Aromatic** (hydrophobic)  
**Amine** (hydrophilic)

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Chemistry 106 Section 003  
Instructor: Kimberly Bode

**Calculating Molar Mass of Paxil:**

C (19) (12.01g)	=	228.19 g
H (20) (1.01 g)	=	20.20 g
F (1) (19.00g)	=	19.00 g
N (1) (14.00g)	=	14.01 g
O (3) (16.00g)	=	48.00 g
		329.40 g/mol

Literature Value for Molar Mass  
329.37 g/mol